## Sequence Listing

(1) Name of Applicant: DNAVEC RESEARCH INC.

(2) Title of the Invention: Vectors for Treating Cancer

(3) Reference Number: D3-906PCT

(4) Application Number:

(5) Filing Date:

(6) Country where the priority application was filed and the application number of the application: Japan, No. Hei 9-223651

(7) Priority date: August 20, 1997

(8) Number of Sequences: 28


SEQ ID NO: 1:
SEQUENCE LENGTH: 28
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 1
GATCTCTCGA GCCCGGGGGT ACCGCATG                                    28


SEQ ID NO: 2:
SEQUENCE LENGTH: 20
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 2
CGGTACCCCC GGGCTCGAGA                                             20


SEQ ID NO: 3:
SEQUENCE LENGTH: 32
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single

TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 3
TCGAGGGACT TGCCTGGACT TGCCTGTCGA CG                    32

SEQ ID NO: 4:
SEQUENCE LENGTH: 32
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 4
GTACCGTCGA CAGGCAAGTC CAGGCAAGTC CC                    32

SEQ ID NO: 5:
SEQUENCE LENGTH: 46
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 5
TCCCTCGAGA CGCGTGTTTA AACCAATGCC CTGGCTCACA AATACC      46

SEQ ID NO: 6:
SEQUENCE LENGTH: 45
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 6
TCCGTCGACT GGCCAGCTAG CGGCATATGT TGCCAAACTC TAAAC        45

SEQ ID NO: 7:
SEQUENCE LENGTH: 39
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single

TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 7
TCCCTCGAGA CGCGTAAGCT TTATTGCGGT AGTTTATCA                    39

SEQ ID NO: 8:
SEQUENCE LENGTH: 39
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 8
TCCGAGCTCC GGCCGAGTAC TCTAGCCTTA AGAGCTGTA                    39

SEQ ID NO: 9:
SEQUENCE LENGTH: 36
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 9
TCCGAGCTCC ACGTGCTGTG CCTTCTAGTT GCCAGC                       36

SEQ ID NO: 10:
SEQUENCE LENGTH: 46
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 10
TCCAGATCTG TTTAAACGGC GCGCCAAAGC CCCAAAAACA GGAAGA           46

SEQ ID NO: 11:
SEQUENCE LENGTH: 68
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single

TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 11
TGAAAGCTTC GGCCGCCACC ATGCCCAAGA AGAAGCGCAA GGTGTCCAAT TTACTGACCG    60
TACACCAA                                                            68


SEQ ID NO: 12:
SEQUENCE LENGTH: 33
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 12
TCCGAGCTCC TAATCGCCAT CTTCCAGCAG GCG                                 33


SEQ ID NO: 13:
SEQUENCE LENGTH: 37
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 13
AGCTTCTAGA CAGCCAGACT GCCTTCCGGG TCACTGC                             37


SEQ ID NO: 14:
SEQUENCE LENGTH: 27
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 14
GTTCTAGACC CCATGTAATA AAAGGTG                                        27


SEQ ID NO: 15:
SEQUENCE LENGTH: 55
SEQUENCE TYPE: nucleic acid

STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 15
TCAGGTACCG GCGCGCCAGT ACTGGCCGGC CCGTTACATA ACTTACGGTA AATGG     55


SEQ ID NO: 16:
SEQUENCE LENGTH: 33
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 16
TCCGAATTCG TACAATTCCG CAGCTTTTAG AGC     33


SEQ ID NO: 17:
SEQUENCE LENGTH: 41
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 17
TTGCCGCGGC CTGCAGGCAG ACATGATAAG ATACATTGAT G     41


SEQ ID NO: 18:
SEQUENCE LENGTH: 47
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 18
TCCGAGCTCA GTACTGGCGC GCCAAAAAAC CTCCCACACC TCCCCCT     47


SEQ ID NO: 19:
SEQUENCE LENGTH: 47
SEQUENCE TYPE: nucleic acid

STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 19
AATTCATAAC TTCGTATAGC ATACATTATA CGAAGTTATC CCGGGGC               47


SEQ ID NO: 20:
SEQUENCE LENGTH: 47
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 20
GGCCGCCCCG GGATAACTTC GTATAATGTA TGCTATACGA AGTTATG               47


SEQ ID NO: 21:
SEQUENCE LENGTH: 58
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 21
GGCCGCGTCG ACATAACTTC GTATAGCATA CATTATACGA AGTTATACTA GTCCTGCA        58


SEQ ID NO: 22:
SEQUENCE LENGTH: 50
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 22
GGACTAGTAT AACTTCGTAT AATGTATGCT ATACGAAGTT ATGTCGACGC               50


SEQ ID NO: 23:
SEQUENCE LENGTH: 35
SEQUENCE TYPE: nucleic acid

STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 23
TCCACTAGTT CATGATTGAA CAAGATGGAT TGCAC .                                    35


SEQ ID NO: 24:
SEQUENCE LENGTH: 48
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 24
TTCCGAATTC CCTGCAGGGG ATCCTCAGAA GAACTCGTCA AGAAGGCG                        48


SEQ ID NO: 25:
SEQUENCE LENGTH: 33
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 25
TCCACTAGTG TTATTTTCCA CCATATTGCC GTC                                        33


SEQ ID NO: 26:
SEQUENCE LENGTH: 33
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 26
TCAGGATCCC CATGGCCATG GTATTATCAT CGT                                        33


SEQ ID NO: 27:
SEQUENCE LENGTH: 39
SEQUENCE TYPE: nucleic acid

STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 27
TGAGCCCGGG CCGCCACCAT GGCTTCGTAC CCCTGCCAT                      39


SEQ ID NO: 28:
SEQUENCE LENGTH: 39
SEQUENCE TYPE: nucleic acid
STRANDEDNESSS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acids, synthetic DNA
SEQUENCE DESCRIPTION: SEQ ID NO: 28
TCCTACTAGT GCGGCCGCTC AGTTAGCCTC CCCCATCTC                      39